

=> b reg  
FILE 'REGISTRY' ENTERED AT 13:03:49 ON 08 JAN 2010  
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STRUCTURE FILE UPDATES: 6 JAN 2010 HIGHEST RN 1201136-14-2  
DICTIONARY FILE UPDATES: 6 JAN 2010 HIGHEST RN 1201136-14-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

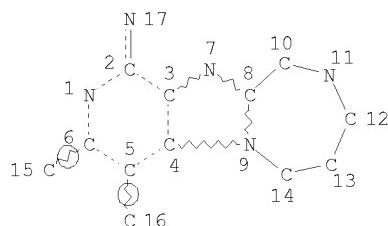
TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d que sta 19  
L7 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE  
L9 665 SEA FILE=REGISTRY SSS FUL L7

100.0% PROCESSED 2627 ITERATIONS 665 ANSWERS  
SEARCH TIME: 00.00.01

=> b zcap  
FILE 'ZCAPLUS' ENTERED AT 13:04:04 ON 08 JAN 2010  
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FILE COVERS 1907 - 8 Jan 2010 VOL 152 ISS 3

FILE LAST UPDATED: 7 Jan 2010 (20100107/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

ZCPlus now includes complete International Patent Classification (IPC)  
reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> d bib abs hitrn fhitstr l12 tot



10 / 596895

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L13 ANSWER 1 OF 1 ZCPLUS COPYRIGHT 2010 ACS on STN  
AN 2006:677628 ZCPLUS

DN 145:145757

TI Preparation of chiral fused [1,2]imidazo[4,5-*c*] ring compds. as inducers of cytokine biosynthesis for treatment of viral and neoplastic diseases

IN Grieshaber, George W.; Kshirsagar, Tushar A.; Celebi, Abduraziq A.;

Johannesen, Sarah C.; Danielson, Michael E.; Rice, Michael J.; Wurst, Joshua R.

PA 3M Innovative Properties Company, USA

SG PCT Intl Appl. 257 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI WO--2006074003 A2 20060713 2005WO-U50047258 20051229  
WO--2006074003 A3 20071122  
W: AE, AG, AT, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
CL, CO, CR, CY, DE, DK, DO, EC, ES, FI, GB, GD,  
GR, GH, GM, HR, HU, IL, IN, IS, JP, KE, KG, KM, KR, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,  
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
VN, ZA, ZM, ZW  
RW: AR, BE, BG, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BE, BJ,  
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KG, KZ, MD, RO, TJ, TM, AP, EA, EP,

AU--2005220904 A3 20050613 2005AU-000222898 20051229  
CA--2592904 A3 20060713 2005CA-002592904 20051229  
EP----1831226 A2 20070912 2005EP-000855766 20051229  
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MK, YU

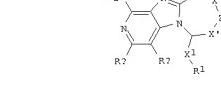
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US-20080269192 A1 20081030 2007US-000813039 20070628

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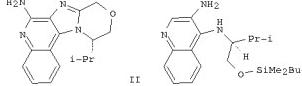
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

CASREACT 145:145757; MARPAT 145:145757

GI



I



II



III

AB Title compds. I (X = a bond, straight or branched alkyne, optionally having a substituent at a C other than the C adjacent to a heteroatom; X' = straight or branched alkyne, optionally having a substituent at a C other than the C adjacent to a heteroatom; provided that the sum of the

L13 ANSWER 1 OF 1 ZCPLUS COPYRIGHT 2010 ACS on STN (Continued)  
ring C atoms contributed by X and X' = 1-3; Z = O, NH and derivs..  
N-502-NH- and derivs., etc.; XI = a bond, alk(en/ynyl)iene; R1 = (S)pent-1-enyl, alk(en/ynyl)ienyl, heteroaryl, etc.; RA, RB independently H, halo, alkenyl, alkynyl, alkyl, etc., where alkenyl, alkynyl, RA and RB form a (un)substituted fused heteroaryl ring; and a (un)substituted fused 5 to 7 membered satd. ring; and their pharmaceutically acceptable salts), were prepd. as immunomodulators for inducing cytokine biosynthesis in animals (cat, dog) and in the treatment of diseases including viral and neoplastic diseases, and in particular example III was prepared via cyclization of diamine III (prepn. given) with Et 2-chloroethanidate•HCl, followed by TBDMs-deprotection in the presence of tetrabutylammonium fluoride/cyclization in THF, oxidn., and amination w/ NH4OH. Certain I modulated cytokine biosynthesis by inhibiting prodn. of interferon  $\alpha$  and/or tumor necrosis factor TNF- $\alpha$  when tested in an *in vitro* blood cell system (no data).

IT 899818-25-ZE

PL: PAC (Pharmacological activity); SPA (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses);  
(drug candidate; preparation of chiral fused [1,2]imidazo[4,5-*c*] ring compds. as inducers of cytokine biosynthesis for treatment of viral and neoplastic diseases)

IT 899818-25-ZF

PL: PAC (Pharmacological activity); SPA (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses);  
(drug candidate; preparation of chiral fused [1,2]imidazo[4,5-*c*] ring compds. as inducers of cytokine biosynthesis for treatment of viral and neoplastic diseases)

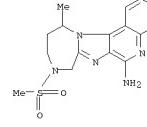
RN 899818-25-ZCPLUS

CN Formic acid, compd. with 9,10,11,12-tetrahydro-12-methyl-9-(methylsulfonyl)-8H-[1,4]diazepino[1',2';1,2]imidazo[4,5-c]quinolin-6-amine (1:1) (CA INDEX NAME)

CM 1

CRN 899818-24-1

CMF C16 H19 N 02 S



CM 2

CRN 64-18-6

CMF C H2 O2

O=CH-OH

=> d his  
(FILE 'HOME' ENTERED AT 12:53:49 ON 08 JAN 2010)  
FILE 'ZCAPLUS' ENTERED AT 12:54:31 ON 08 JAN 2010  
L1 1 US20070167476/PN  
FILE 'REGISTRY' ENTERED AT 12:54:56 ON 08 JAN 2010  
FILE 'ZCAPLUS' ENTERED AT 12:54:56 ON 08 JAN 2010  
L2 TRA L1 1- RN : 1057 TERMS  
FILE 'REGISTRY' ENTERED AT 12:55:16 ON 08 JAN 2010  
L3 1057 SEA L2  
L4 529 L3 AND NRNS>=4  
L5 STR  
L6 37 L5  
L7 STR L5  
L8 36 L7  
L9 665 L7 FULL  
SAV TEM J895C2A/A L9  
L10 342 L9 AND L3  
L11 323 L9 NOT L10  
FILE 'ZCAPLUS' ENTERED AT 13:01:51 ON 08 JAN 2010  
L12 1 L10  
L13 1 L11

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